Quick Statistics

Early Site Permits issued	3
Permits under review	1
COL applications submitted	17
No. reactors submitted	26
COL applications docketed	17
No. reactors docketed	26
Docketed but deferred	4
Total expected license applications	23
Expected number of reactors	34
Certified reactor designs	2
Reactor designs under review	4
Announced plant locations	21
Companies applying for COL	20

Number of Planned Reactors (34)



Status of License Applications (23)



Announced Nuclear Locations

- Amarillo (TX)—Amarillo Power
- Bell Bend (PA)—PPL (formerly Susquehanna)
- Bellefonte (AL)—Tennessee Valley Authority
- Elmore County (ID)—Alternate Energy Holdings
- Callaway (MO)—AmerenUE
- Calvert Cliffs (MD)—UniStar
- Clinton (IL)—Exelon
- Comanche Peak (TX)—Luminant
- Fermi (MI)—DTE Energy
- Grand Gulf (MS)—Entergy
- Shearon Harris (NC)—Progress Energy
- Levy County (FL)—Progress Energy
- Nine Mile Point (NY)—UniStar
- North Anna (VA)—Dominion Energy
- River Bend (LA)—Entergy
- South Texas Project (TX)—STP Nuclear
- V.C. Summer (SC)—SCE&G
- Turkey Point (FL)—Florida Power & Light
- Victoria County (TX)—Exelon Generation
- Vogtle (GA)—Southern Nuclear
- William States Lee III (SC)—Duke Energy

Vendor Technologies Under Consideration

General Electric

- Advanced Boiling Water Reactor (ABWR) 1,356 MWe (certified 10CFR52 App A)
- Economic Simplified Boiling Water Reactor (ESBWR) – 1,560 MWe

Westinghouse

 Advanced Passive Pressurized Water Reactor (AP1000) – Twin units 1,117 MWe each (certified 10CFR52 App D)

AREVA

 United States Evolutionary Pressurized Water Reactor (US EPR) – 1,600 MWe

Mitsubishi Heavy Industry

 United States Advanced Pressurized Water Reactor (US APWR) – 1,700 MWe



U.S. Department of Energy Office of Nuclear Energy

Nuclear Power Deployment Scorecard

Powering Future Decades





U.S. Department of Energy Office of Nuclear Energy

March 5, 2009

Updates available at http://www.nuclear.gov

What's New

The South Texas Project Nuclear Operating Company signed an EPC contract with Toshiba for two ABWRs on February 25, 2009. A previous contract addressed pre-construction & licensing.

NRC authorized the reinstatement of construction permits for TVA's unfinished Bellefonte Units 1 and 2 near Scottsboro, AL on February 19.

The South Carolina Public Service Commission (PSC) approved SCE&G's plans for two AP1000 reactors at V.C. Summer on February 11.

NRC published final guidance February 18 on new reactor construction activities allowed under a Limited Work Authorization (LWA).

NRC issued an updated review schedule for the ESBWR on February 18. GEH committed to prepare Rev. 6 of the DCD resolving open items; it must be submitted by Aug. 31 to avoid delays.

In February, DOE narrowed the reactor applicants eligible for loan guarantees to five.

On February 13, UniStar requested that the NRC delay its review of the Nine Mile Point COLA as the company will focus its resources on the Calvert Cliffs COLA.

NRC issued the final safety evaluation report (FSER) for Southern's ESP and LWA at the Vogtle site on February 11.

NRC gave notice of hearings for the public to intervene in the following COLAs:

- Callaway (AmerenUE)
- Comanche Peak (Luminant)
- South Texas (STPNOC)

DOE received a notice of intent to request a conditional agreement under its Standby Support Program on February 3.

Legend

- Implementation proceeding according to plan and schedule
- Progress being made; however, issues or uncertainties exist that could impede progress
- Unlikely to realize objectives absent significant management attention
- No dates or end state established
 Indicates change in status or progress since last evaluation
- Regulatory Demonstration completed. No further government assistance is warranted.

Nuclear Power Deployment Scorecard



- Three site permits issued by NRC (Clinton, Grand Gulf, North Anna)
- One site permit application under NRC review (Vogtle)
- Submission of three other ESP applications expected in 2010-2012

Combined Construction and Operating License (COL) License Applications Submitted to NRC

- Thirteen COLAs docketed and under review
- Three docketed COLAs suspended pending technology decision
- One docketed COLA is delayed as the power company focuses on a previously submitted COLA
- Submission of 6 additional COLs expected in 2009-2010

Status of Reference R-COLs

 All five R-COLs have been submitted and are undergoing NRC review (Bellefonte, Calvert Cliffs, Comanche Peak, North Anna, South Texas Project)

Reactor Design Certification (DC)

- Two advanced reactor designs certified by NRC (ABWR and AP1000)
- Four reactor designs undergoing NRC review (ESBWR, US-EPR, AP1000 amend., and US-APWR)

New Nuclear Plant Orders

Long-Lead Equipment Orders

- Nine utilities have ordered large, long-lead nuclear component forgings from three reactor vendors
- Four steel containment shells and 24 reactor coolant pumps have been ordered for AP1000 units
- Two domestic large component facilities being built
- Japan Steel Works is the only manufacturer of ultra-large forgings; worldwide-capacity limited

Engineering, Procurement, and Construction Contracts (EPC)

- Four EPC contracts initiated (Vogtle, V.C. Summer, STP and Progress)
- Plant engineering is in progress; completion required to start construction

New Nuclear Plant Construction, Operation, & Deferral

- No utility has committed to constructing a new advanced reactor
- TVA resumed construction of Watts Bar 2 and construction permits for Bellefonte 1 & 2 were reinstated

Federal Financial Incentives

Standby Support (Risk Insurance)

- Final 10 CFR Part 950 Rule issued August 11, 2006
- Two active Notices of Intent to Request a Conditional Agreement; a third notice has been withdrawn. One formal request under review by DOE.

Production Tax Credits

- Internal Revenue Bulletin 2006-18 published May 2006
- IRS considering revised guidance

Nuclear Power Loan Guarantees

- The Department is authorized, until September 30, 2009, to guarantee \$18.5 billion in loans for nuclear power projects. First NRC-issued COL not expected before mid-2011, beyond current authority period—authority extension needed to keep program viable.
- Fifteen power companies have submitted Part II applications by the December 19, 2008 deadline, requesting a total of \$93 billion in loans to be guaranteed. The applications cover 10 sites with a total of 16 reactors, capable of providing 22 GW in generating capacity.
- DOE has narrowed the new reactors eligible to receive loan guarantee to five applicants.